AMENDMENTS TO THE CLAIMS

Please amend claims 1-7, 13, 18 and 20-27 as follows.

1. (currently amended)   In an electronic device, a method, comprising the steps of:

providing input color data for a group of pixels in an input color space; and

building an ~~initial palette~~ with intermediate table ~~the color data, wherein, for each pixel in the group of pixels,~~ for storing the input color data ~~is stored in the initial palette~~, wherein said input color data is stored at an indexed position, the indexed position being ~~determined based on~~ responsive to the input color data;

converting the input color data in the ~~initial palette~~ intermediate table to ~~a converted~~ an output color ~~palette~~ data in an output color space, wherein the same input color data in different pixels is stored once in the intermediate table to avoid repeated conversion calculations for the different pixels having the same input color data; and

~~-~~for each pixel in the group of pixels substituting the output color data ~~representations in the converted color palette at the indexed position~~ for the input color data.

2. (currently amended)   The method of claim 1 further comprising the step of using a host function to determine the indexed position in the ~~initial color palette~~ intermediate table for each of the pixels in the group of pixels.

3. (currently amended)   The method of claim 1 wherein the ~~initial color palette is for~~ input color space comprises a (R, G, B) color space.

4. (currently amended)   The method of claim 3 wherein the ~~converted color palette is for~~ output color space comprises a (C, M, Y, K) color space.

5. (currently amended)   The method of claim 3 wherein the ~~converted color palette is for~~ output color space comprises a (C, M, Y) color space.

6. (currently amended)   The method of claim 1 wherein the ~~initial color palette is for~~ input color space comprises a grey scale color space.

7. (currently amended)   The method of claim 1 wherein the ~~converted color palette is for~~ output color space comprises a grey scale color space.

8. (original)   The method of claim 1 wherein the electronic device is a computer system.

9. (original)   The method of claim 1 wherein the electronic device is an image-reproducing apparatus.

10. (original)   The method of claim 1 wherein the electronic device is a copier.

11. (original)   The method of claim 1 wherein the electronic device is a printer.

12. (original)   The method of claim 1 wherein the group of pixels comprises a row of pixels.

13. (currently amended)   In an electronic device, a method, comprising the steps of:

    providing a set of input color data for pixels, said input color data encoding colors for the pixels in a first color space;

    for each of the pixels, determining an index for the pixel based on the color data for the pixel;

    building a ~~first color palette, wherein the first color palette holds~~ an intermediate table for holding the input color data at a position of the index;

    converting the ~~first~~ input color ~~palette~~ data in the intermediate table into ~~a second~~ an output color ~~palette for~~ data in a second color space, wherein ~~each position in the second color palette holds a representation of a color in the second color space that corresponds to a representation of the color in the first color space at a like position in the first palette~~ the same input color data in different pixels is held once in the intermediate table to avoid repeated conversion calculations for the different pixels having the same input color data; and

    ~~converting the set of color data to encode colors in the second color space,~~ for each pixel, ~~by~~ substituting the ~~representation of~~ output color data ~~in the second palette at the position of the index for the pixel~~ for the input color data ~~of the pixel.~~

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14. (original) The method of claim 13 wherein one of the first color space and the second color space is a (R, G, B) color space.

15. (original) The method of claim 13 wherein one of the first color space and the second color space is a grey scale color space.

16. (original) The method of claim 13 wherein one of the first color space and the second color space is a (C, M, Y, K) color space.

17. (original) The method of claim 13, wherein the method is performed by a processor.

18. (currently amended)   A device for converting color representations of a set of pixels, comprising:

a storage facility for storing a first palette for a first color space an intermediate table, wherein the first palette intermediate table holds input color representations of a set of pixels at positions of indices, the indices being determined based on responsive to the color representations of the set of pixels; and

a conversion facility for converting the input color representations of the set of pixels in the intermediate table to output color representations in a second color space, said conversion facility converting the first palette for the second color space and using representations in the second palette to convert the set of pixels wherein the same input color representation in different pixels is stored once in the intermediate table to avoid repeated conversion calculations for the different pixels having the same input color representation.

19. (original) The device of claim 18 wherein the conversion facility is implemented by a processor.

20. (currently amended)   An improved method of converting color image data for a group of pixels from a first color space to a second color space, comprising

mapping input color image data for the group of pixels in the first color space to indices of an initial color palette array, wherein each position of the index of the initial color palette

~~array holds the color image data in the first color space~~ the input color image data is stored in an intermediate table at positions of the indices,

converted the input color image data in the ~~initial color palette array~~ intermediate table to ~~a converted color palette array comprised of~~ an output color image data in the second color space, wherein the same input color image data in different pixels is stored once in the intermediate table to avoid repeated conversion calculations for the different pixels having the same input color image data;

reconstructing the group of pixels in the second color space using the ~~converted~~ output color ~~palette array~~ data.

21. (currently amended)   The method of claim 20, further comprising a step of using a hash computer programming function to determine the indexed position in the ~~initial color palette array~~ intermediate table for each of the pixels in the group of pixels.

22. (currently amended)   The method of claim 21, wherein the indexed position of the pixels is also stored in ~~a palette~~ an index array at a location in the ~~palette~~ index array that corresponds to a location in the group of pixels.

23. (currently amended)   The method of claim 20 wherein the ~~initial color palette array is for~~ first color space comprises a (R, G, B) color space.

24. (currently amended)   The method of claim 20 wherein the ~~converted color palette array is for~~ second color space comprises a (C, M, Y, K) color space.

25. (currently amended)   The method of claim 20 wherein the ~~converted color palette array is for~~ second color space comprises a (C, M, Y) color space.

26. (currently amended)   The method of claim 20 wherein the ~~initial color palette array is for~~ first color space comprises a grey scale color space.

27. (currently amended)   The method of claim 20 wherein the ~~converted color palette array is for~~ second color space comprises a grey scale color space.